Original Article

KNOWLEDGE, ATTITUDE AND PRACTICE OF MATERNAL HEALTH CARE AMONGST THE MARRIED WOMEN IN A RURAL AREA OF BANGLADESH

Sonia Shirin

Department of Community Medicine, Ibrahim Medical College, Shahbagh, Dhaka

Abstract

Bangladesh is facing a big challenge in reducing maternal and neonatal mortality. Addressing maternal health issues is now on the global social agenda in the new millennium. This cross sectional descriptive study was conducted in the unions of Sreepur Upazilla in March 2010 among 300 rural married women having at least one living child. Data were collected by face to face interviews using a semi-structured questionnaire to asses the knowledge, attitude and practice on maternal health care of married women in Sreepur Upazilla. The mean ± SD age of women was 33.5 ± 10.4 years and monthly income was Tk. 6,518.3 ± 5,142.4. Reproductive history of the women reveals that mean ± SD age at marriage, age at first child, and parity were 15.3 ± 2.9, 18.2 ± 3, 3 ± 2 years respectively. Only 42.3% of the respondents knew about swelling of the foot, 36.3% were aware of fits, 25.7% knew about severe headache and 24.7% knew about unusual bleeding as warning signs of pregnancy. About 84.3% respondents knew that the first meal of the baby should be colostrum. Among the participants 57%, 70.7% and 62.3% had average knowledge on ANC, INC and PNC respectively. Rural married women having a positive attitude towards maternal health care was 96.3% in ANC, 80% in home delivery, 61.3% in hospital delivery and 95.3% in PNC. It was found that 35.6% and 27.1% respondents were taking ANC 3 and 4 times respectively. Among the respondents 66.7% had done their laboratory examination and 84.7% took vitamins adequately. About 67.2% respondents performed normal physical work as before during pregnancy and 30.5% took more food than before. Home delivery was practiced by 88.3% respondents and 10.3% women delivered their baby at the hospital. Among the respondents who delivered their baby at home, 64.9% of them practiced few of the features of safe home delivery. Practice was good on ANC among 55.3% respondents where poor practice was found 69.3% on INC and 72.3% on PNC. Age and monthly income were related to knowledge on ANC ($P < .001$, $P < .05$) and PNC ($P < .01$, $P < .05$) respectively. Practice on maternal health care also related to socio-economic condition of the rural women. Women in rural settings are vulnerable due to poor maternal health care and exposed to risk of pregnancy and child birth. Appropriate health education activities, encouraging institutional delivery and development of socio-economic status are key factors to improve our maternal health.

Ibrahim Med. Coll. J. 2011; 5(1): 13-16

Key Words: Knowledge, attitude, practice, maternal health care, Bangladesh.

Introduction

Maternal and child health are important indicators for describing mortality conditions, health progress and the overall social and economic wellbeing of a country. Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. Pregnancy is a natural process and every woman have the right of access to appropriate health care services that will enable her to plan and go safely through pregnancy and child birth.[1] Pregnancy and child birth related complications are among the leading causes of maternal mortality in Bangladesh.[2] Bangladesh records a high maternal mortality ratio, with 320 deaths per

Address for Correspondence:

Dr. Sonia Shirin, Assistant Professor, Department of Community Medicine, Ibrahim Medical College, 122 Kazi Nazrul Islam Avenue, Shahbagh, Dhaka-1000, Bangladesh

100,000 births.[3] This means that about 12,000 women die from pregnancy or childbirth related complications every year – more than 30 every day.[3] Bangladesh is facing a big challenge in reducing maternal and neonatal mortality.[4]

The health of women is a crucial factor in the health of children. Since maternal and newborn health is inextricably linked, of those women who die, only one in four of their babies will survive their first week of life.[3] The maternal and neonatal deaths can be appropriately addressed with antenatal, intranatal and postnatal care. Unfortunately, study of rural areas have shown that pregnant women receiving antenatal care from medically trained provider is 46.4%, births delivered at home is 89.2%, delivery assistance from a medically trained provider is 10.7%, women receiving postnatal checkup is 16.5%.[5] Antenatal care coverage of 40% was also shown by State of World's Children.[6] Bangladesh Demographic and Health Survey also report only 13% of births being assisted by doctors, trained nurse and midwives. Lack of knowledge of maternal health is responsible for such a situation.[7]

The aim of this study was to find out the level of knowledge, attitude and practice (KAP) on maternal health care of rural married women of Sreepur Upazilla. KAP study tells us what people know about certain things, how they feel and also how they behave.

A sound knowledge, correct attitude and proper practice of antenatal, intranatal and postnatal care and early detection of danger signs and seeking medical help from appropriate centres could lower the mortality and morbidity.

Materials and Methods

This cross sectional study was conducted in the month of March 2010 in 8 villages of 2 unions of Sreepur upazilla which was purposively selected as a part of our residential field site training (RFST) program. Rural married women having at least one live child living in different unions of Sreepur upazilla were taken as a sample. A total of 300 respondents were selected on the basis of their availability for interview. After taking a verbal consent, a face to face interview was conducted using a pre-tested questionnaire having both structured and open ended questions. All collected data were corrected and entered into the computer based SPSS program for analysis.

Calculation of knowledge, attitude and practice

To estimate the level of knowledge, attitude and practice of respondents, questions were asked on maternal health care and for each appropriate answer a score of 1 was given while score 0 was given to each inappropriate answer.

Results

The mean ± SD age of women was 33.5± 10.4 years and monthly income Tk. 6,518.3 ± 5,142.4. Rural married women were mainly house wives (96%) and 89% were below SSC level. Reproductive history of the women revealed that mean ± SD age at marriage, age at first child, parity was 15.3 ± 2.9, 18.2 ± 3, 3 ± 2 years respectively.

The respondents' knowledge about the warning signs during pregnancy were poor. Only 42.3% knew about swelling of the foot, 36.3% were aware of fits, 25.7% knew about severe headache and 24.7% knew about unusual bleeding. While inquiring about breastfeeding, 84.3% respondents mentioned colostrum as the baby's first meal. Among the participants 57%, 70.7% and 62.3% had average knowledge on ANC, INC and PNC respectively. Rural married women had positive attitude towards maternal health care i.e. 96.3% in ANC, 80% in home delivery, 61.3% in hospital delivery and 95.3% in PNC. Three and four times ANC were taken by 35.6% and 27.1% respondents respectively. Among the respondents 66.7% had done their laboratory examination and 84.7% took vitamins adequately. About 67.2% respondents continued normal physical work and 30.5% took more food than before. Home delivery was practiced by 88.3% respondents and 10.3% women delivered their baby in a hospital.

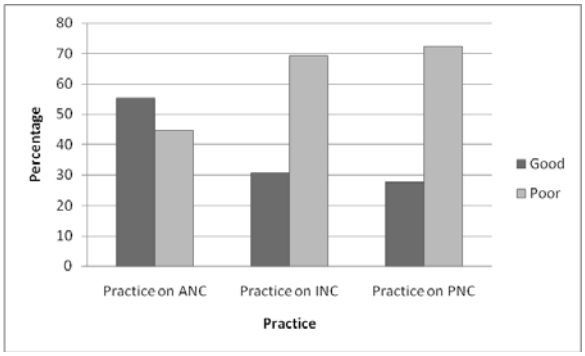

Fig-1: *Comparison on practice of ANC, INC and PNC*

Table-1: *Knowledge of ANC in relation to socio-demographic variables*

Socio-demographic variables	Knowledge on ANC				*P value*
	Poor n (%)	Average n (%)	Good n (%)	Total n (%)	
Age in years					
< 31yrs	19(26.0)	96(56.1)	34(22.8)	149(49.7)	
31 - 49 yrs	38(31.9)	61(51.3)	20(16.8)	119(39.7)	.000
> 49 yrs	16(50.0)	14(43.8)	2(6.2)	32(10.7)	
Total	73(24.3)	171(57.0)	56(18.7)	300(100)	
Monthly income (Tk)					
< 5000	31(42.5)	66(38.6)	14(25.0)	111(37.0)	
5000 - 10000	39(53.4)	89(52.0)	30(53.6)	158(52.7)	
10001 - 15000	1(1.4)	11(6.4)	6(10.7)	18(6.0)	.028
> 15000	2(2.7)	5(2.9)	6(10.7)	13(4.3)	
Total	73(24.3)	171(57.0)	56(18.7)	300(100)	

p value (chi square)

Among the respondents who delivered their baby at home, 64.9% of them practiced few of the features of safe home delivery. Practice on ANC was good among 55.3% respondents while 69.3% on INC and 72.3% on PNC had poor practice (Fig1).

There was a significant relationship between age and monthly income of the respondent to knowledge on ANC ($p < .001$, $p < .05$) and PNC ($p < .01$, $p < .05$) respectively (Tables 1 & 2).

Socio-economic condition of rural women was related to practice on ante natal care (Table 3). Practice on intra natal care and post natal care was also significantly related to monthly income ($p < .05$) and age ($p < .01$) respectively.

Table-2: *Knowledge of PNC in relation to socio-demographic variables*

Socio-demographic variables	Knowledge on PNC				*P value*
	Poor n (%)	Average n (%)	Good n (%)	Total n (%)	
Age in years					
< 31yrs	46(41.8)	101(54.0)	2(66.7)	149(49.7)	
31 - 49 yrs	43(39.1)	75(40.1)	1(33.3)	119(39.7)	.007
> 49 yrs	21(19.1)	11(5.9)	0(0)	32(10.7)	
Total	110(36.7)	187(62.3)	3(1)	300(100)	
Monthly income (Tk)					
< 5000	45(40.9)	66(35.3)	0 (0)	111(37.0)	
5000 - 10000	60(54.5)	97(51.9)	1(33.3)	158 (52.7)	
10001 - 15000	3(2.7)	14(7.5)	1(33.3)	18(6.0)	.012
> 15000	2(1.8)	10(5.3)	1(33.3)	13(4.3)	
Total	110(36.7)	187(62.3)	3(1)	300 (100)	

p value (chi square)

Table-3: *Practice of ANC in relation to socio-demographic variables*

Socio-demographic variables in ANC	Practice on ANC			*P value*
	Poor n (%)	Good n (%)	Total n (%)	
Age in years				
< 31yrs	33(24.6)	116(69.9)	149(49.7)	
31 - 49 yrs	73(54.5)	46(27.7)	119(39.7)	.000
> 49 yrs	28(20.9)	4(2.4)	32(10.7)	
Total	134(44.7)	166(55.3)	300(100)	
Monthly income (Tk)				
< 5000	61(45.5)	50(30.1)	111(37.0)	
5000 - 10000	63(47.0)	95(57.2)	158(52.7)	
10001 - 15000	5(3.7)	13(7.8)	18(6.0)	.037
> 15000	5(3.7)	8(4.8)	13(4.3)	
Total	134(44.7)	166(55.3)	300(100)	

p value (chi square)

Discussion

To assess the knowledge, attitude and practice on maternal health care among rural married women, we carried out a cross sectional descriptive study in Sreepur Upazilla by interviewing 300 mothers.

The mean age of the mothers interviewed was 33.5 years. The finding differs from the study of Safdar S *et al.* where, the mean age of the mothers was 29 years.[8] Rural married women were mainly house wives (96%) and 89% were below SSC level. This was similar to the study of Miah MN *et al.* where 92% respondents were housewives and 86% respondents were below SSC level.[1] Reproductive history of the women found that mean $\pm$ SD age at marriage and age at first child was 15.3 ± 2.9 and 18.2 ± 3 years respectively. A study on Afghan women in Kabul found that about 67% respondents had their first child between 13-19 years of age.[9]

The respondents' knowledge about the warning signs during pregnancy was poor. Only 42.3% of the respondent's knew about swelling of the foot, 36.3% were aware of fits, 25.7% knew about severe headache whereas 24.7% knew about unusual bleeding. However in Rahman M *et al.* report, 54.6% respondents knew about severe headache, 36.4% were aware of convulsions and 19% were aware about vaginal bleeding.[10] Of the respondents 57% had an average knowledge on ANC.

It was found that 35.6% and 27.1% respondents went for ANC 3 and 4 times respectively. 16% women went

for ANC 4 times in a study conducted in the slums of Delhi.[11] Among the respondents, 66.7% had done their laboratory examination and 84.7% took vitamins adequately. About 67.2% respondents performed normal physical work during pregnancy and 30.5% took more food than before. The latter result is lower than that found in Egypt where 42% respondents increased their food intake.[12] About 84.3% respondents know that the first meal of the baby should be colostrum. The result is lower than that seen in the report of Bhasin SK *et al.*, where 92.7% of the mothers had the knowledge on feeding colostrum after birth.[13] About 62.3% respondents had an average knowledge of PNC.

Regarding attitude, 96.3% respondents showed a positive attitude towards ANC, 80% showed a positive attitude towards home delivery and 95.3% showed positive attitude towards PNC. About 61.3% showed positive attitude towards hospital delivery, which is higher than the data of another report by Yasmin N *et al.*, which showed 49.3% respondents gave their opinion on hospital delivery as safe.[2] In this study, 88.3% respondents had home delivery and a huge difference is seen when this result is compared with a rural community of China, where only 3% respondents had their delivery at home.[14]

The study shows that knowledge and practice of ANC has significant association with the age and monthly income of respondents. There is also significant relationship between practice on INC and monthly income. The study elucidates that knowledge on PNC has significance in relation to age in years and monthly income.

Conclusion and Recommendation

Rural married women are still victims of early marriage and early child birth. Hence these women are more prone to complications before, during and after delivery. Knowledge on ANC was better than INC and PNC. Practice on ANC was good where as in INC and PNC it was poor. There is still a preponderance of home delivery over institutional delivery amongst the rural women. A significant relationship exists between maternal health care and socio-economic status of women. Focusing health education activities in all settings providing maternity services that ensures clients' participation in the learning process and encourage institutional delivery are essential to bring about changes in the maternal health status. Lastly, improvement in the overall socio-economic status is crucial in improving our maternal health.

References

1. Miah MN, Begum J. Antenatal care pratice of pregnant women. *JOPSOM* 2007; **26**(2): 36-44
2. Yasmin N, Alam K, Lahiry S, Faruquee MH, Ahmed T. Knowledge, attitude and practice regarding hospital delivery among rural married women in northern Bangladesh. *Ibrahim Med. Coll. J.* 2009; **3**(1): 17-20.
3. UNICEF. Maternal health of Bangladesh, 2007.
4. Begum HA, Khan MFH. Knowledge and practice on neonatal care among selected mothers attending Dhaka shishu hospital. *Ibrahim Med. Coll. J.* 2009; **3**(2): 59-62.
5. Bangladesh Demographic Health Surveys 2007.
6. UNICEF. The State of World's Children 2004.
7. Bangladesh Demographic Health Survey 2004.
8. Safdar S, Inam SN, Omair A, Ahmed ST. Maternal health care in a rural area of Pakistan. *The Journal of Pakistan Medical Association* 2002; **52**(7): 308-11.
9. van Egmond K, Naeem AJ, Verstraelen H, Bosmans M, Claeys P, Temmerman M. Reproductive health in Afghanistan: results of a knowledge, attitudes and practices survey among Afghan women in Kabul. *Disasters* 2004; **28**(3): 269-82.
10. Rahman M, Abedin S, Kamruzzaman, Islam N. Women's Empowerment and Reproductive Health: Experience from Chapai Nawabganj District in Bangladesh. *Pakistan Journal of Social Sciences* 2008; **5**(9): 883-88.
11. Puri RK, Sachadev HPS. Maternal and Child Health in Slums of Delhi A Summary Report. NFI Bulletin April, 1992.
12. Sherbini AF, Torky MA, Ashmawy AA, Abdel-Hamid HS. Assessment of knowledge, attitude and practices of expectant mothers in relation to antenatal care in Assiut governorate. *The Journal of Egypt Public Health Association* 1993; **68** (5-6): 539-65.
13. Bhasin SK, Kumar R, Singh S, Dubey KK, Kapil U. Knowledge and attitudes of Anganwadi workers about infant feeding in Delhi. *Indian Pediatrics* 1995; **32**(3): 346-50.
14. Wu Z, Viisainen K, Li X, Hemminki E. Maternal care in rural China: a case study from Anhui province. *BMC Health Services Research* 2008; **8**: 55.